September 11, 1998

Mr. William Chilson
US Generating Company
100 Pine Street, Suite 2000
San Francisco, CA 94111

Dear Mr. Chilson,

LA PALOMA GENERATING PROJECT DATA REQUESTS

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess project alternatives and potential mitigation measures.

Data requests are being made in the areas of: air quality, biological resources, water resources and waste management. Written responses to the enclosed data requests are due to the Energy Commission staff on or before October 13, 1998, or at such later date as may be mutually agreed.

If you are unable to provide the information requested, need additional time to provide the information or object to providing it, you must, within 15 days of receipt of this notice, send a written notice to both Commissioner Robert A. Laurie, Presiding Member of the Committee for the La Paloma Generating Project proceeding, and me. The notification must contain the reasons for not providing the information, the need for additional time and the grounds for any objections (see Title 20, California Code of Regulations section 1716 (e)).

A publicly noticed workshop is scheduled for September 17, 1998, at the Pioneer Senior Citizen Center in Buttonwillow, California, to discuss and clarify these data

requests. Staff will be available to answer questions regarding the data requests and the level of detail required to answer the requests satisfactorily.

If you have any questions regarding the enclosed data requests, please call me at (916) 653-0159.

Sincerely,

Marc S. Pryor
Energy Facility Siting Project Manager

cc: La Paloma Generating Project Proof of Service List
Ray Menebroker, California ARB
Jean Woecker, California ARB
Tom Goff, San Joaquin Valley Unified APCD
Matt Haber, U.S. EPA, Region IX
Carol Bohnencamp, U.S. EPA, Region IX
Reza Ahfami, Central Valley Regional Water Quality Board
Thomas Clark, Kern County Water Agency
Jerry Pearson, West Kern Water District
David Rickels, Kern County Planning Dept.
Gabriele Kidwell, Kern County Waste Mgmt. Dept.
Capt. Ruben Padilla, Kern Co. Fire Sta. 24
Dale Mitchell, California Department of Fish and Game
Mike Stettner, California Dept. of Oil and Gas
Peter Cross, U.S. Fish and Wildlife Service

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LA PALOMA GENERATING PROJECT
DATA REQUESTS
(98-AFC-2)

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LA PALOMA GENERATING PROJECT
DATA REQUESTS
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Technical Area: Air Quality
Author: Keith Golden

ISSUE: In order for the staffs of the Energy Commission and the San Joaquin Valley Unified Air Pollution Control District (District) to determine compliance with all District rules, the applicant needs to demonstrate that the project complies with certain emission limitation rules.

1. Please provide all assumptions and calculations to demonstrate compliance with the following San Joaquin Valley Rules:

    a. Rule 4201 - Particulate Matter Concentrations, specifically Section 3.0, Requirements.

    b. Rule 4702 - Stationary Gas Turbines, specifically Section 5.0, Requirements.

    c. Rule 4801 - Sulfur Requirements, specifically Section 3.0, Requirements.

ISSUE: The Application for Certification (AFC) refers (p. 3.5-5) to 7,000 cubic yards of borrow soil that will be needed at the project construction site. It is unclear where this soil will be coming from, either from on site or from some distant site. Emissions from this truck traffic will need to be included in the construction emissions calculations.

2. Please discuss the location of the borrow site and the route(s) that will be used to transport the material to the project site.

3. Please discuss all aspects of the borrow soil transport plan. This should include but not be limited to:

    a. The duration in weeks or months that soil will be transported to the site.

    b. The number of trucks per day that will deliver soil.

    c. The daily emissions (NOx, VOC, CO and PM10) from the use of these vehicles within Kern County. Include all assumptions and calculations to substantiate these emissions.

ISSUE: Tables in the appendices of the AFC (pp. K5-52 through -54) present the project's annual emissions, which do not appear to consider the combustion turbine

shutdown emissions. In order to accurately reflect the total permitted emissions from the project, and thus the emissions offset liability, the shutdown emissions need to be included in those calculations.

4. Please clarify and revise p. K5-52 to reflect the appropriate number of cold start-ups, warm start-ups and shutdowns.

ISSUE: The applicant is proposing to install the SCONOx™ control technology on one of the four turbine trains and Selective Catalytic Reduction (SCR) on the remaining three. This commercial use of SCONOx™ would be the first use of this technology on this size combustion turbine. In other siting cases, applicants have been reluctant to employ SCONOx™, citing reasons such as engineering design scale-up, lack of experience on larger size combustion turbines and vendor guarantees. Since the applicant is proposing to use SCONOx™, staff needs to understand what information the applicant has that assures them that this is a viable and commercially available control technology.

5. Please describe the factors that convinced the applicant that SCONOx™ is an appropriate technology for the project. Please provide the engineering documentation and vendor guarantee information that supports the conclusions reached for the use of SCONOx™.

ISSUE: On p. 3.4-28 of the AFC, the Applicant states that "(i)n the event that acceptable vendor guarantees and permit conditions cannot be obtained (for 2.5 ppm NOx), the project will commit to a NOx emission limit of 3.0 ppmvd at 15 percent O_2, and revise the air impact analysis to reflect this higher rate." In order for staff to appropriately analyze the project, staff needs to have an accurate project description which also includes the planned emission rates. Staff will need a committed emission rate sometime during the discovery phase of the AFC process in order to complete its analysis.

6. Please discuss when, during the AFC process, the Applicant intends to secure "acceptable vendor guarantees" for 2.5 ppm NOx.

ISSUE: Although the AFC (pp. 5.2-25 & 26) discusses the use of an oxidizing catalyst, it appears that the applicant is not proposing it for their project. Recent AFC filings with the Energy Commission for projects using similar combustion turbine technology (Calpine-Sutter & Enron-Pittsburg) have proposed the use of an oxidizing catalyst. In addition, the operating Crockett Cogeneration Project, using a Frame 7F model turbine, has an oxidizing catalyst installed. Staff believes that from the standpoint of minimizing emissions of CO and VOC as well as applying Best

Available Control Technology (BACT) as required by the District's Rule 2201, Section 4.0, an oxidizing catalyst should be considered as part of the project design.

7. Please describe why, despite the extensive experience of oxidizing catalyst systems on combustion turbine power generation systems, the applicant does not propose to use such an emission control system on their project. Please also discuss why, despite the District's determination that oxidizing catalyst systems have been defined as BACT for other combustion turbine projects, the applicant does not believe that such a system would constitute BACT for their project.

ISSUE: Although the ammonia slip concentration is estimated at 10 ppm, the quantity of ammonia emissions from the Heat Recovery Steam Generator stacks could be considerable (on the order of hundreds of pounds per day). To determine whether the ammonia emissions from the project constitute an impact on secondary PM10 formation (ammonium nitrate PM10), staff will need to understand the magnitude of ammonia mass emissions.

8. Please provide all assumptions and calculations used by the applicant to quantify the mass ammonia slip emission rates from the exhausts of the heat recovery steam generators.

ISSUE: The AFC (p 5.2-39) states that the project's construction related impacts would violate the 24-hour PM10 and 1-hour NO_2 ambient air quality standards. However, there is no discussion in the AFC addressing either the magnitude of those impacts or the appropriate mitigation that the applicant will provide to reduce those impacts.

9. Please provide a discussion (including quantification) of the magnitude of the construction impacts on the NO_2, CO and PM10 standards. We suggest providing tables similar to AFC Table 5.2-16 to display those impacts. Also, as part of this discussion, please include the likelihood or probability that these impacts will actually occur.

10. Please discuss the mitigation measures the applicant will employ to reduce the magnitude of the construction related impacts on the NO_2 and PM10 standards.

ISSUE: During the initial commissioning phase of the project's operation, the four combustion turbines will be subject to changing load and testing, which may or may not include the full operation of the air pollution control equipment, such as the dry-low NOx combustors, SCR and SCONOx™. Although there is a discussion of initial plant

operation in Section 3.8.8, this discussion does not include information about combustion turbine operations associated with the various emission control technologies. Staff will need information as to how this commissioning period will be structured from an emission control standpoint, and whether specific permit conditions will need to be prepared that could be included in the Commission's license, if the project is approved.

11. Please discuss the following aspects of the initial commissioning operations:

    a. The anticipated length of time (in weeks or months) during which testing of all equipment will necessitate relief from normal operating emission limits.

    b. The types of testing that will occur that will result in emissions in excess of the normal operating emission limits.

    c. The magnitude of emissions (particularly NOx, CO and VOC) and the duration of excess emissions (minutes or hours) that will be addressed by special permit conditions for this initial commissioning phase.

ISSUE: The combustion turbine start-up scenario described in the AFC (p. 5.2-40) appears to vary between sequential start-ups (used in the 1-hour modeling) and simultaneous start-ups (used in the 8-hour and 24-hour modeling). Staff needs to understand both how the applicant intends to operate the four combustion turbines during start-up, and how the applicant will reflect that assumption in the modeling analysis and ultimately in permit limits.

12. Please explain how the "worst-case scenario" of two turbines operating at full load and then the sequential start-up of two more turbines was derived. Please explain why a simultaneous start-up of all four turbines was not assumed to be the worst-case short-term start-up (1-hour) scenario.

13. Please clarify what start-up scenario you wish staff to presume for air quality analysis and thus for possible permit limits that would be part of the conditions of certification.

ISSUE: The applicant states in the AFC (p. 5.2-65) that they "expect to complete options/agreements with Emission Reduction Credit (ERC) holders by September 1998." In order to expedite the staff analysis of the project, it would be desirable to receive these options/agreements as early during the AFC process as possible. Also, the applicant appears to want to use interpollutant trading of NOx and/or SO_2 ERCs

for their PM10 liability. The AFC (p. 5.2-65) mentions the development of a "protocol" for the establishment of the appropriate interpollutant trading ratio.

14. Please provide copies of the options/agreements from the ERC holders as soon as they become available.

15. Please provide the interpollutant trading ratio protocol and provide copies of any other technical analysis the applicant has used to support an appropriate interpollutant trading ratio.

Technical Area: Biological Resources
Author: Rick York

ISSUE: The applicant has provided a discussion of the anticipated acreage amounts that will be permanently lost or temporarily disturbed during project construction and operation. Also provided on page 7-8 of section 7-2 of the Biological Assessment are compensation ratios used to calculate the "compensation obligation" the applicant expects to institute. The AFC does not identify the source(s) for these compensation ratios.

16. Please identify the references used for all habitat compensation ratios and a copy of each reference, if available.

ISSUE: Biological resource summer field surveys were mentioned on pages 4-7 and 4-13 of the Biological Assessment.

17. Please provide the results of the summer field surveys.

ISSUE: The Mitigation Plan contained in the Biological Assessment provides mitigation recommendations that will ultimately be included in a document the Commission identifies as the Biological Resources Mitigation Implementation Plan (BRMIP). The Commission intends to work closely with the applicant and other state and federal wildlife protection agencies (Bureau of Land Management, U. S. Fish and Wildlife Service, and the California Department of Fish and Game) to finalize the BRMIP prior to the release of the Commission's La Paloma Preliminary Staff Assessment.

18. Please provide an update on the work being done to create the BRMIP.

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Technical Area: Soils and Water Resources
Author: Joe O'Hagan

ISSUE: Wastewater from the La Paloma Generating Project will be disposed of by deep well injection. Such a disposal method requires a permit from either the U. S. Environmental Protection Agency (EPA) or the California Regional Water Quality Control Board (RWQCB), depending upon the characteristics of the formation to be used. A test well has been drilled to characterize the formation where the wastewater will be discharged into. It is important that the necessary permit be submitted and evaluated by the responsible agency during the certification process.

19. Please provide the results of the deep well test drilling. This should include a description of the well that was drilled as well as a characterization of the targeted formation. Also provide a copy of all information that will be submitted in the application for either a Class I or Class IV injection well to either the EPA or the RWQCB, respectively.

ISSUE: Construction and operation of the La Paloma Generating Project may induce water and wind erosion at the power plant site and along the associated linear facilities.

20. Please provide a draft erosion control and stormwater management plan that identifies measures that should be implemented at the power plant and associated facilities, including the proposed turnout and pump station for the California Aqueduct. The plan should identify all permanent and temporary measures in written form and depicted on a construction drawing(s) of appropriate scale. A drawing showing the proposed turnout for the California Aqueduct and the pump station should be provided as well.

    The elements of the plan should include temporary and permanent measures including stormwater runoff control efforts. Any measures necessary to address Nation Wide or other permits, should be identified. The plan should also identify maintenance and monitoring efforts for all erosion and stormwater runoff control measures.

ISSUE: State Water Project water will supply the proposed project from the preferred turnout location on the California Aqueduct at Highway 58. Interruptions in State Water Project deliveries occur due to both natural and man-made causes, such as normal maintenance, earthquakes, etc.

21. Please provide the details of a backup water supply for the project during any interruptions, both planned and unplanned, in State Water Project deliveries.

Technical Area: Waste Management
Author: Ellen Townsend-Smith

ISSUE: Staff will identify and evaluate issues concerning the risks and environmental impacts associated with handling, storing, treating, and disposing of project-related hazardous and non-hazardous wastes.

After reviewing sections 5.14.2.1 and 5.14.2.3 of the AFC, staff determined that additional information is required to complete an analysis of the proposed project's waste management program. The information is required to allow staff to independently evaluate the potential for risks and environmental impacts associated with waste management.

22. Please submit separate tables (for construction and operation) that provide the following information for each hazardous and non-hazardous waste generated at the project site: waste stream, origin and composition, estimated amount, estimated frequency of generation, and waste management (both on-site and off-site methods, if applicable.) Please refer to the High Desert Power Plant AFC Table 5.8-3 (pp. 5.8-10 and -11) as an example.